

REMARKS

This application pertains to a novel process for the continuous production of self-adhesive articles, wherein a polyurethane-forming reactive mixture of polyol and isocyanate components are continuously applied to a first backing material which is coated with a pressure sensitive adhesive composition, the isocyanate and polyol reacting on the adhesive coated backing material to form a polyurethane composition and the resulting laminate passed through a heat tunnel wherein the polyurethane composition cures, and the laminate is then wound in a winding station.

Unlike the prior art processes, the laminate produced by the instant process can be wound up immediately after exiting the heat tunnel, without the requirement of allowing the polyurethane to complete a further hardening. This further hardening, which typically is required in the prior art, can take several days to accomplish in the prior art.

It is surprising that Appellants' laminate, with the cured but unhardened polyurethane, can be wound up without adverse effect. Those skilled in the art would have expected adverse effects, such as wrinkles and/or waives to have resulted.

Claims 1-8 are pending

Claims 1-8 stand rejected under 35 U.S.C. 103(a) as obvious over Schumann et al (U.S. 6,129,983) in view of Cotsakis et al (U.S. 5,686,179). The Examiner acknowledges that Schumann does not disclose mixing the components continuously, continuously applying the mixture to the release paper, and rolling the laminate at a winding station. The Examiner turns to Cotsakis, however, for what he sees as a teaching of continuously mixing the components *in a continuous mixing extruder*, continuously applying the mixture to the release paper, curing the mixture in a continuous oven, rolling the tape onto a tape core to form a tape roll.

The Examiner therefore concludes that it would be obvious to apply the techniques of Cotsakis to Schumann, to somehow arrive at Applicants' process.

There are, however, a number of details overlooked by the Examiner, which will show that his conclusion is not correct.

First of all, the Examiner overlooks the fact that Cotsakis is not really a continuous process, as Cotsakis' reactants are initially prepared in a batch mixer. See, for example, Col. 5, lines 43-50, wherein Cotsakis teaches that

"the brominated isoprene...are combined in a mixer...preferably a Banbury-type intensive batch mixer, where they are mixed and blended to form a rubbery mass... The resultant mass is then chopped using a conventional rubber chopper..."

This is clearly not a continuous process, notwithstanding the use of a continuous mixing extruder downstream of the foregoing step.

Secondly, Cotsakis has nothing to do with the formation of a polyurethane backing. Cotsakis is concerned with an EPDM type polymeric mixture, which uses a peroxide initiator. The technology of EPDM is completely different than the technology of polyurethanes!

Moreover, Cotsakis has nothing to do with the application of a backing to an adhesive layer; Cotsakis is concerned only with a single-layer tape.

In addition Cotsakis rolls up an essentially uncured single-layered tape, which he can do because of the composition of his particular tape. Those skilled in the art, in the absence of Applicants' disclosure, would never think of rolling up an unhardened **polyurethane** tape! In this regard, see Col. 8, lines 6-13, of Schümann, wherein Schümann cures and stores his **polyurethane** backing for one week before applying the adhesive!

Thus, no person skilled in the art would ever combine Cotsakis and Schümann, as the two are dealing with two completely different kinds of tape (single layer vs. backing + adhesive layers), and completely different kinds of chemistry (EPDM + vs.

polyurethane). In addition, no person skilled in the art would think it possible to continuously form a polyurethane backing onto an adhesive and then wind it up without allowing several days for the polyurethane to harden.

Those skilled in the art would find Applicants' continuous process completely surprising.

Nothing in the references cited would suggest that Applicants' process would be possible. To the contrary, the cited references would teach away from Applicants' process; especially in view of Schumann's teaching to cure and store the backing for one week before applying the adhesive.

The Examiner may see the language at Col 8, lines 18-32, as an argument against the foregoing. However, nothing in this language addresses the step of winding the tape up on a roll, or the "curing and storage" of the tape prior to rolling it up, which is taught in the immediate preceding language. There is therefore no suggestion of including the winding-up step in a continuous process.

Thus, Applicants' process cannot be seen as obvious over Schumann et al in view of Cotsakis, and the rejection of claims 1-8 under 35 U.S.C. 103(a) as obvious over said references should now be withdrawn.

Claim 8 stands rejected under 35 U.S.C. 103(a) as obvious over Schumann et al

in view of Cotsakis et al (U.S. 5,686,179) and further in view of the so-called "admitted prior art". The Examiner relies on the "admitted prior art" for a teaching of various dehesive media. The differences between Applicants' process and anything that could be derived from the Schumann/Cotsakis references are far greater than the use of specific dehesive media, as discussed above. The use of specific dehesive media in the Schumann or Cotsakis processes, will not in any way convert either of them to Applicants'. In addition, as stated above, it would be virtually impossible to combine the processes taught by these two references an any meaningful way, since the processes themselves are fundamentally different, and the chemistries of the materials they are dealing with are fundamentally different.

The rejection of Claim 8 under 35 U.S.C. 103(a) as obvious over Schumann et al in view of Cotsakis and further in view of the so-called "admitted prior art" should accordingly now be withdrawn.

Regarding the Interview Summary annexed to the Office Action; the undersigned believes that the Examiner's comments are in error. The undersigned may have acknowledged the Examiner's position, but certainly did not and does not agree, as can be seen from the foregoing, that any of the claims were or are unpatentable! The sole issue was whether or not the combination of the claims would have persuaded the Examiner to allow the application.

In view of the present remarks it is believed that claims 1-8 are now in condition

for allowance. Reconsideration of said claims by the Examiner is respectfully requested and the allowance thereof is courteously solicited.

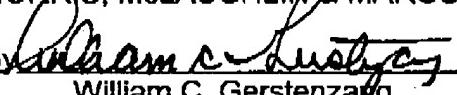
CONDITIONAL PETITION FOR EXTENSION OF TIME

If any extension of time for this response is required, Appellants request that this be considered a petition therefor. Please charge the required petition fee to Deposit Account No. 14-1263.

Additional Fee

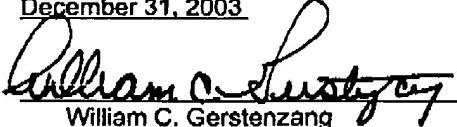
Please charge any insufficiency of fee or credit any excess to Deposit Account No. 14-1263.

Respectfully submitted,
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I hereby certify that this correspondence is being transmitted via facsimile addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Arlington, VA 22313-1450, Fax Number (703) 872-9306 on December 31, 2003


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Date December 31, 2003